

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-54. (canceled)

55. (currently amended) ~~[[The]]~~ A tissue matrix of claim 51 comprising placental stem cells, wherein the placental stem cells are CD10⁺, CD29⁺, ~~CD34⁻~~, CD44⁺, CD45⁻, CD54⁺, CD90⁺, SH2⁺, SH3⁺, and SH4⁺; wherein said placental stem cells are additionally OCT-4⁺, SSEA3⁻ or SSEA4⁻; and wherein said tissue matrix is made by a method comprising seeding human placental stem cells into or onto a tissue matrix, wherein said stem cells are from a human placenta that has been drained of cord blood and perfused to remove residual blood.

56. (currently amended) ~~The method of claim 24~~ A method of making a tissue matrix, comprising seeding human placental stem cells into or onto a tissue matrix, wherein said stem cells are from a human placenta that has been drained of cord blood and perfused to remove residual blood, wherein said placental stem cells are CD34⁻, SSEA3⁻, SSEA4⁻, and OCT-4⁺.

57. (currently amended) ~~The method of claim 24~~ A method of making a tissue matrix, comprising seeding human placental stem cells into or onto a tissue matrix, wherein said stem cells are from a human placenta that has been drained of cord blood and perfused to remove residual blood, wherein said placental stem cells are CD10⁺, CD29⁺, ~~CD34⁻~~, CD44⁺, CD45⁻, CD54⁺, CD90⁺, SH2⁺, SH3⁺, and SH4⁺; and wherein said placental stem cells are additionally OCT-4⁺, SSEA3⁻ or SSEA4⁻.

58. (new) A tissue matrix comprising human placental stem cells, wherein the placental stem cells are CD34⁻, SSEA3⁻, SSEA4⁻, and OCT-4⁺.

59. (new) A tissue matrix comprising human placental stem cells, wherein the placental stem cells are CD34⁻, CD10⁺, CD29⁺, ~~CD34⁻~~, CD44⁺, CD45⁻, CD54⁺, CD90⁺, SH2⁺, SH3⁺, and SH4⁺; and wherein said placental stem cells are additionally OCT-4⁺, SSEA3⁻ or SSEA4⁻.